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02 05 28 33 CDR Okay.

02 05 28 35 CC Alright. Tape the red filter to the telephoto lens. That red filter is the 25A red filter, not the one that is in the red and blue filter slider.

02 05 28 48 CDR Roger.

02 05 28 49 CC Attach telephoto lens to the camera.

02 05 28 56 CDR Okay. We can figure out how to do that. Roger.

02 05 29 00 CC Insure that the automatic light control, the ALC switch on the camera, is in the IN position.

Over.

02 05 29 11 CDR ALC IN. Roger.

02 05 29 14 CC Roger. Attach camera to the adjustable TV bracket and attach the bracket to the TV mounting point on the commander's side of the hatch to point out rendezvous window number 2.

02 05 29 41 CDR Roger.

02 05 29 43 CC Okay. There is a note here that says use dovetail on top of camera, rather than the side dovetail. Use the dovetail on the top of the camera for mounting to bracket and place the rocking nut on the bracket down, and down means toward your minus X direction.

02 05 30 16 CDR Roger.

02 05 30 18 CC Okay. They say this step I just got through giving you is somewhat complicated. You might want to get

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the cameras set up early using the instructions I just gave you. When it's properly - -

02 05 30 31 CDR

We are not reading you.

02 05 30 34 CC

Roger. I say again, the instructions that I just gave you should end up having the camera looking out the window and about 30 degrees yawed left from your plus X-axis, so I suggest you get the camera set up that way early; and if there are any problems, come back to us; we will talk them over. These mounting instructions are sort of complicated.

02 05 31 00 CDR

Roger.

02 05 31 03 CC

Okay. The next step: dim the interior lights. Over.

02 05 31 12 CDR

Dim interior lights.

02 05 31 14 CC

Roger. Next, stop passive thermal control at gimbal angles pitch 224, yaw 020, roll 270. Over.

02 05 31 36 CDR

Pitch 224, yaw 020, roll 270.

02 05 31 41 CC

Roger. Next, acquire on high-gain antenna, switch to AUTO tracks, now beam upon acquisition. Over.

02 05 32 02 CDR

Got it.

02 05 32 04 CC

Okay. Yaw spacecraft left to get good view of earth and your rendezvous window number 2. You may have to pitch slightly as well, but primarily a left yawing maneuver to get a good view of the earth.

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02 05 32 20 CDR Got it.

02 05 32 22 CC Okay. This maneuver is going to put you very close to your scan limits for the high-gain antenna, so while you are making the maneuver, check your lights. If your scan limit light comes on, you still have got 15 degrees to play with. But the only message is, should you break lock, then you are going to have to go back and reacquire and do that maneuver over again, because you are going to be very close to the edge of your high-gain antenna capability.

02 05 32 52 CDR Thank you.

02 05 32 54 CC Okay. And then finally, now that you have got the spacecraft over there, aim the camera as required to include the earth and the field of view, and do not touch the body of the lens while televising. Apparently, if you put your hands on the lens itself, it causes electrical interference. Over.

02 05 33 26 CDR Okay. Aim camera and do not touch lens while televising.

02 05 33 30 CC Right. And in all this stuff in all these pictures using the ALC, it is important that you let the camera stabilize for at least 10 or 20 seconds, to let the ALC do its thing.

02 05 33 58 CDR Stabilize for 10 to 20 seconds. Thank you.

02 05 34 01 CC Right. Now we have some additional instructions in case this does not work. They say a full 20, Frank,

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on that ALC. It requires a full 20 seconds undisturbed for the ALC to properly do its thing. Now if these procedures that I've given you do not work, then we will be giving you some more, and they have to do with other filters and various combinations thereof. So I'd have the polarizing filter and the red and blue filter holder at hand because we will be attempting to use those in addition to the red filters if this procedure doesn't work.

02 05 34 43 CDR

All very well, Mike.

02 05 34 46 CC

That's all we have right now. We will have a few more remarks on the TV coming up to you later.

I would suggest that you get set up for this early, and if you have any questions on it, shoot them down to us. We have a bunch of experts down here to help out.

02 05 35 03 CDR

Thank you; will do.

END OF TAPE

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02 06 06 18	CC	Apollo 8, this is Houston. Over.
02 06 06 23	CDR	Go ahead, Houston. Apollo 8.
02 06 06 25	CC	Roger. Just a voice check, Frank.
02 06 06 30	CDR	Roger. You're loud and clear.
02 06 06 32	CC	Thank you.
02 06 18 50	CC	Apollo 8, Houston.
02 06 18 55	CDR	Go ahead, Houston. Apollo 8.
02 06 18 57	CC	Roger. We would like some high bit rate data when you can get it locked up on the high gain. We haven't had any of that for a while.
02 06 19 06	CDR	Roger. We will do that.
02 06 19 09	CC	Thank you. How is that camera bracket thing working out?
02 06 19 13	CDR	We are doing it right now.
02 06 19 53	CDR	Houston, this is Apollo 8 transmitting to you on the high gain. How do you read?
02 06 19 57	CC	Read you loud and clear, Frank. Thank you.
02 06 20 08	CDR	Apollo 8 transmitting on the high-gain antenna.
02 06 20 11	CC	Apollo 8, Houston. You are loud and clear. Thank you for the high gain.
02 06 20 18	CDR	Roger.
02 06 32 59	CDR	Houston, this is Apollo 8. Are you getting high bit rate all right?
02 06 33 08	CC	That is affirmative, Apollo 8. We are getting a good high bit rate.
02 06 33 14	CDR	Thank you.

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02 06 33 36 CC Apollo 8, Houston.

02 06 33 40 CDR Go ahead.

02 06 33 42 CC Roger. I've got some more talking to do about the TV any time it's convenient for you.

02 06 33 48 CDR Go ahead.

02 06 33 50 CC Okay. First thing, we've made no provisions in these instructions for taking pictures of the moon. If you get some moon shots after it's all over by looking out a different window or by making some small maneuver, or course, we would be happy to have them, but the show as scheduled is just out the window at the earth only. Over.

02 06 34 15 CDR Roger.

02 06 34 17 CC The second point is, of course, when you stop your passive thermal control, you are about 90 degrees to the earth line, so when you make that yaw left, you are going to have to yaw left until your middle gimbal angle is in the vicinity of 60 degrees. You will get the additional 30 degrees by offset between where the camera is pointed and your plus X axis. But the two together are going to total up around 90. We just wanted to make sure that you understood you were going to be working with a large middle gimbal angle. Over.

02 06 34 52 CDR Roger. We understand that. We also are looking at the earth right now, and there is a spectacular

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long thin band of clouds. Looks like it may be a jet stream. It's absolutely spectacular - going almost all the way - or half way around the earth.

02 06 35 12 CC Roger. Well, you might want to repeat that during the TV narrative, and we would like you, if possible, to go into as much of a detailed description as you poets can on the various colors and sizes of those things and how the earth appears to you, in as much detail as you can possibly muster. Over.

02 06 35 36 CDR Roger. I figure we will have to do that because I bet you - I won't bet - but I bet the TV doesn't work.

02 06 35 44 CC Well, we won't take that bet, but anyway, we are standing by for a nice lurid description, and we would suggest that you talk a little bit slower than you did yesterday. Over.

02 06 35 56 CDR Okay.

02 06 35 58 CC And the only other thing on this TV is that the experts tell us that - do not point - with the wide angle lens on the camera, do not point at either the earth or the moon. It comes close to damaging interior of the instrument due to the fact that it's too bright. Over.

02 06 36 18 CDR Understand.

02 06 36 20 CC Thank you.

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02 06 41 23 LMP Houston, Apollo 8. We're going to have to switch to an OMNI.

02 06 41 28 CC Roger, Apollo 8.

02 06 52 57 CC Apollo 8, Houston. Over.

02 06 53 03 CDR Go ahead, Houston. Apollo 8.

02 06 53 05 CC Roger. Just checking the voice COMM, Frank.

02 06 53 09 CDR Thank you.

02 06 57 39 CC Apollo 8, Houston.

02 06 57 44 CDR Go ahead, Houston.

02 06 57 46 CC Roger. We'll be switching antennas from Madrid to Goldstone in another 3 minutes. You can expect a glitch on your COMM.

02 06 57 56 CDR Thank you.

02 07 02 38 CDR Houston, how do you read? Apollo 8.

02 07 02 41 CC Apollo 8, Houston. We're reading you loud and clear through Goldstone. Over.

02 07 02 46 CDR Okay. We have the television ON now, and we're trying to maneuver to the - to the earth.

02 07 02 55 CC Roger. Understand.

02 07 04 11 CMP Houston, Apollo 8.

02 07 04 15 CC Apollo 8, Houston. Over.

02 07 04 20 CMP Roger. We're maneuvering to position now for the TV. Bill's got it set up in Frank's left rendezvous window, and I'm over in Bill's spot looking out the right rendezvous window, and the earth is now passing through my window. It's about as big as the end of my thumb.



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02 07 04 45 CC About as big as the end of your thumb at arm's length, huh?

02 07 02 51 CMP That's right. I think what we see now is South America down below us.

02 07 02 55 CC Roger. Is the TV camera pointed about 30 degrees yaw left from the plus X axis?

02 07 05 05 CMP Stand by a moment. We're checking it. We think we've got it in the right position. We're going into position now.

02 07 05 13 CC Okay.

02 07 05 33 LMP Houston, are you getting any sort of a picture?

02 07 05 52 CC Apollo 8, Houston. Negative; not yet.

02 07 06 32 LMP Okay. Houston, Apollo 8. We should have - -

02 07 07 36 CDR Hello, Houston; this is Apollo 8. We have the television camera pointed directly at the earth now and have followed the instructions you gave us.

02 07 07 45 CC Roger, Frank. We're picking something up on our TV. It's not very good so far, but let it sit for a second, and we'll have more instructions for you.

02 07 08 00 CC Okay. It's coming into view now, Frank.

02 07 08 07 CDR It is?

02 07 08 08 CC Yes. We have it in the corner of our screen. You're slightly off on your pointing, but we're getting a darn good look at the corner of it.

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02 07 08 21 CC It's moving off, Frank. It's moving off our -  
3 o'clock on our TV screen. I have no idea  
what to tell you about which way to point.

02 07 08 32 CC It's moving further away. We've lost it now.

02 07 08 57 CC Apollo 8, Houston. Receiving nothing now. Over.

02 07 09 03 CDR Okay.

02 07 09 05 CC We're receiving the picture; we're just not  
seeing the view of the earth.

02 07 09 11 CDR Roger. I got you.

02 07 09 16 CC Okay. We are just picking it up at 3 o'clock  
on our screen.

02 07 09 21 CDR Okay.

02 07 09 23 CC It is moving up toward 1 o'clock and in toward  
the center; keep it going in that direction.

02 07 09 29 CDR Okay.

02 07 09 31 CC It's looking better. You're holding it about  
1 or 2 o'clock. Looking better. Give us a  
little more in that same direction. You're down  
at 3 o'clock now. We see about half of what you  
see. Too much. It is disappearing at our  
5 o'clock. Now it is coming back. It is half  
off - screen at our 2 o'clock.

02 07 10 05 CC And it's disappeared off at our 3 o'clock. There,  
it is coming back in now. It is headed toward the  
center of our screen.

02 07 10 14 CC MARK.

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02 07 10 15

CC

It is right in the center of our screen. Just hold her - hold her steady. It is really looking good. Okay. We have - -

02 07 10 28

CMP

What you're seeing, Mike, is a - Houston, what you are seeing is the Western Hemisphere. Looking - at the top is the North Pole; in the center - just lower to the center is South America - all the way down to Cape Horn. I can see Baja California and the southwestern part of the United States. There is a big long cloud bank going northeast, covers a lot of the Gulf of Mexico, going up to the eastern part of the United States, and it appears now that the east coast is cloudy. I can see clouds over parts of Mexico; the parts of Central America are clear. And we can also see the white, bright spots of the subsolar point on the light side of the earth.

02 07 11 28

CC

Roger. Could you give me some ideas about the colors, and also, could you try a slight maneuver? It is disappearing. We're seeing about half of it. It is going off to our 12 o'clock. Now it is going off to our 3 o'clock. That is the wrong direction. Yes, that is a good direction.

02 07 11 50

CC

We need another small correction to bring it to our center screen. If you could maneuver toward the terminator, that is the part of it we are missing.

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We are getting the lighted portion. There you go; that's fine. Stop it right there.

02 07 12 17 CMP

Okay. For colors, waters are all sort of a royal blue; clouds, of course, are bright white; the reflection off the earth is - appears much greater than the moon. The land areas are generally a brownish - sort of dark brownish to light brown in texture. Many of the vortices of clouds can be seen of the various weather cells. A long band of - it appears cirrus clouds that extend from the entrance to the Gulf of Mexico going straight out across the Atlantic. The terminator, of course, cuts through the Atlantic Ocean right now, going from north to south. Southern Hemisphere is almost completely clouded over, and up near the North Pole there is quite a few clouds.

02 07 13 25 CC

Southwestern Texas and southwestern United States is clear. I'd say there are some clouds up in the northwest and over in the northeast portion. Roger. Could you maneuver toward the terminator again, please?

02 07 13 34 CC

A little bit more. Stop her right there and hold it. It keeps slipping up a little bit; could you maneuver slightly more toward the terminator?

02 07 14 02 CDR

How is that, Houston?

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02 07 14 05 CC We are getting about half of the earth, Frank.  
The top half - our top half which includes the  
dark portion it - is obscured.

02 07 14 19 CDR How is the definition on the picture?

02 07 14 23 CC Looks pretty good.

02 07 14 28 CMP Can you see cloud patterns at all?

02 07 14 31 CC That's affirmative.

02 07 14 36 CMP Good.

02 07 14 39 LMP Are you still seeing it, Houston?

02 07 14 42 CC Yes, we are seeing it. We are missing the  
portion of the earth that is over toward the  
terminator. The dark portion of the earth is  
what we are not picking up. We are getting  
about three-quarters or four-fifths of the  
rest of it.

02 07 14 56 LMP . Roger. I will move it, and tell me when I am  
getting better or worse please.

02 07 15 01 CC Good.

02 07 15 08 CC Stop right there. That is worse, Bill. Go  
back where you were. You make it disappear to  
our 3 o'clock. Now it's coming back. Okay.  
Stop right there. Now you are back where you were,  
and we need a motion that is about 90 degrees to  
that last one you gave us.

02 07 15 38 CC That is the wrong 90 degrees. 180 degrees away  
from that one.

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02 07 15 47 CC Stop right there. Okay. Now we have lost a different half of it. I need a motion 90 degrees to that last one.

02 07 16 24 CC That is good right there, Bill. That is good right there.

02 07 16 42 CC Apollo 8, Houston. If you can stick your polarizing filter in front of the camera without disturbing anything else, it might improve the quality slightly.

02 07 17 02 LMP Stand by.

02 07 17 04 CC Roger, Bill.

02 07 17 12 LMP Okay. The polarizing filter is in front.

02 07 17 24 LMP How is it now, Mike?

02 07 17 28 CC Still looking good. That didn't make much of a change one way or another, but in general, considering how far away, it's looking excellent.

02 07 17 51 LMP Well, I hope that everyone enjoys the picture that we are taking of themselves. How far away from earth now, Jim, about?

02 07 18 03 CC We have you about 180 000.

02 07 18 11 LMP You are looking at yourselves at 180 000 miles out in space.

02 07 18 22 CMP Frank, what I keep imagining is if I am some lonely traveler from another planet what I would think about the earth at this altitude, whether I think it would be inhabited or not.

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02 07 18 31 CC Don't see anybody waving; is that what you are saying?

02 07 18 36 CMP I was just kind of curious if I would land on the blue or the brown part of the earth.

02 07 18 44 LMP You better hope that we land on the blue part.

02 07 18 48 CC So do we, babe.

02 07 18 49 LMP Jim is always for land landings. *Jim?*

02 07 18 55 CC Roger. This picture is drifting off center again. If you could make another correction to bring it back. I couldn't tell you which direction, but you're going the right way, you're going the right way. A little bit more; a little bit more. Whoa, stop right there. That's the best centering we have had, Apollo 8. If you could just hold that, that's perfect.

02 07 19 25 CMP To give you some idea, Mike, of what we can see: I can pick out the southwest coastline of the Gulf and where Houston should be, and also the mouth of the Mississippi; I can see Baja California and that particular area. I am using a monocular that we have aboard.

02 07 19 50 CC Roger. Understand.

02 07 19 55 CMP This is an 8-power instrument I have.

02 07 19 58 CC Right. Well, we are seeing the entire earth now including the terminator. Course we can't see anything past the terminator at all. Are

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you able with your binoculars to see the dark horizon? Anything past the terminator?

02 07 20 13 CMP Negative, Mike. We can't see anything past the terminator with the binoculars or without them. This earth is just too bright, and it cuts down the night adaptation to see anything on the dark side.

02 07 20 31 CC Roger. Understand.

02 07 20 33 LMP Since this is winter - since this is winter time in the northern hemisphere, we can see all of the South Pole and the southern ice cap, and not too much of the North Pole.

02 07 20 48 CDR Hey, you and Jim better get together. Jim just said he saw the North Pole.

02 07 20 54 CC He is looking out a different window.

02 07 20 57 LMP That is what makes it different.

02 07 20 59 CC Do you still have the - -

02 07 21 01 LMP He has the monocular upside down.

02 07 21 03 CC Do you still have the polarizing filter in front of the camera?

END OF TAPE



APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

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--- LMP Negative?  
 --- CC Okay.  
 --- CC Try putting it back in front of the camera one  
 more time.  
 --- LMP ... Okay?  
 --- CC And once again, we need a small attitude correction.  
 Our earth is disappearing up and to the right.  
 Our earth and your earth. The wrong way, wrong  
 way. A little bit more. Okay. That is fine  
 if you can hold it right there. Oops! Now it's  
 slipping back off again. Okay. Keep coming a  
 little bit more, a little bit more. Okay. Ninety  
 degrees to that direction; that is the wrong 90,  
 the other way. There we go. A little bit more.  
 Nope, wrong way, wrong way; I am sorry. Keep  
 coming in that direction. No, it is gone up at  
 our 12 o'clock. There we go, it is coming back  
 down. There we go, it's coming back down, it's  
 coming back down. Bring it down a little bit  
 more. Okay. Stop. Now we need 90 degrees to  
 that direction again.  
 02 07 22 54 LMP I hope that the next camera has a sight on it.  
 02 07 22 58 CC Roger.  
 02 07 23 11 LMP How is that?  
 02 07 23 13 CC Well, that has disappeared, just practically.  
 We were wondering if there was any change of your

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looking out one of the other windows and seeing the moon? Hey, it is coming back in, Bill. Okay. Hold it right there. That is just fine for the earth right where you are. That is extremely good on the earth if you can just hold that.

02 07 23 35 CDR I don't think we have - It has the polarizing filter in front of it now, Mike.

02 07 23 43 CC Roger. Thank you, and it is centered very well. We get a very slight improvement with this, but in general, it is very good considering the distance. How about the moon, Frank? Is it visible through one of your other windows? Could you get it visible with a small maneuver?

02 07 24 05 CDR Negative. I think we will have to save the moon for another time.

02 07 24 08 CC Roger. I understand. You are still very well centered with your picture. We noticed a couple of jumps in the apparent intensity. Did you make some filter changes?

02 07 24 37 CDR Roger. We tried to put that other red filter in front of it, but it didn't seem to fit.

02 07 24 43 CC Roger.

02 07 24 49 CC We would - On a final test when you get down to the end of your allotted time here, we would like you to remove all filters and let us see how it looks with all filters removed, and then we would

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like to get several spotmeter readings at the very end after the test.

02 07 25 13 CDR Okay. We will be removing the red filter now.

02 07 25 15 CC Roger.

02 07 25 50 CDR Do you still have us, Mike? The lens is off now.

02 07 25 53 CC Roger. We have it, and if you could maneuver it toward the terminator slightly, you would again center our picture.

02 07 26 11 CDR Okay. Stand by. How's that? Is that the right direction?

02 07 26 21 CC That is the right direction. Keep coming. Now that is the wrong direction, Frank. Did you - -

02 07 26 44 CDR How is it now, Houston?

02 07 26 46 CC Well, negative. I need another maneuver toward the terminator. It is drifting off the screen to our 11 o'clock. We appear to need a maneuver toward the terminator, Frank.

02 07 27 08 CDR Thank you.

02 07 27 17 CC No, that is apparently the wrong way, Frank. We are starting to lose the picture. There you go. That is the correct way.

02 07 27 35 CDR Okay, Houston. How's that for today?

02 07 27 39 CC That is just fine, Frank. That's great. We would like to, at the conclusion here, take three spotmeter readings. You can do that at any time at your convenience. We would just

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like to get some after-the-fact readings on the earth intensity.

02 07 27 55 CDR Roger. Jim has got the spotmeter on now.

02 07 27 57 CC Thank you.

02 07 27 58 CDR Is it centered now, Houston?

02 07 28 00 CC Not quite, Frank.

02 07 28 08 CC That's good right there. Hold that right there. That's perfect.

02 07 28 24 CDR Okay, earth. This is Apollo 8 signing off for today.

02 07 28 29 CC Good show, Apollo 8. We appreciate it. See you mañana.

02 07 28 34 CDR Roger.

02 07 28 55 CC We have Haney down here following your trajectory, so all is well. He says you're 10 minutes from the moon's sphere of influence.

02 07 29 04 CDR Okay. Good.

02 07 33 28 CDR Houston, Apollo 8. Returning to the PTC mode.

02 07 33 34 CC Apollo 8, Houston. Understand; returning to PTC. Thank you.

02 07 33 41 CDR Roger.

02 07 33 54 CC You can tell Jim he is getting pretty ham-handed with that P21; he got a perilune altitude three-tenths of a mile off what we are predicting down here.

02 07 34 08 CDR Is that right?

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02 07 34 09 CC Roger. Apparently, he got 69.7, and the RTC says 70.

02 07 34 18 CDR Are we going to leave it at that, or are we going to correct it to make it lower?

02 07 34 24 CC We are talking about it, Frank.

02 07 34 50 CDR We have got a lumen reading of about between 1 and 1.25 thousand - 1.25 K.

02 07 35 01 CC Roger. Understand; between 1 and 1.25 K. Thank you.

02 07 35 31 CMP Houston, Apollo 8.

02 07 35 35 CC Apollo 8, Houston.

02 07 35 40 CMP Roger. If you put your CMTLM to ACCEPT, we will send you our state vector.

02 07 35 47 CC Touché.

02 07 45 03 CDR Houston, Apollo 8.

02 07 45 06 CC Apollo 8, Houston.

02 07 45 10 CDR How does everything look, Mike, all our systems and everything? See any switches out of place?

02 07 45 16 CC Negative. I'll take a check around here, but it is looking good. Just a second.

02 07 45 23 CDR We are over in the cabin, Mike, like monkeys, and I wanted to make sure we didn't hit anything.

02 07 45 51 CC Apollo 8, Houston. Everything is looking good down here. All switches and systems are GO.

02 07 46 00 CDR Thank you.

02 07 50 25 CDR Houston, Apollo 8. How are you reading on OMNI D?

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02 07 50 28 CC We are reading you loud and clear, Frank.

02 07 50 32 CDR Okay. We are reading you like that, also. Thank you.

02 07 50 38 CC We are having a playback of your TV shows and are all enjoying it down here. It was better than yesterday because it didn't preempt the football game.

02 07 50 57 CDR Thank you. Don't tell me they cut off a football game; didn't they learn from Heidi?

02 07 51 10 CC Well, you and Heidi are running neck and neck in the telephone call department.

02 08 10 06 CDR Houston, Apollo 8.

02 08 10 09 CC Go ahead, Apollo 8.

02 08 10 12 CDR Hey, Jerry, how much water does this - the water dispenser in the lower equipment bay, the one that puts out hot and cold water - how much comes out of that with each shot?

02 08 10 23 CC Stand by. I'll take a check on that. And, by the way, welcome to the moon's sphere.

02 08 10 32 CDR The moon's fair?

02 08 10 34 CC The moon's sphere - you're in the influence.

02 08 10 39 CDR That's better than being under the influence.

02 08 11 00 CDR Hey, Jerry?

02 08 11 03 CC Go ahead, 8.

02 08 11 07 CDR My handy LMP had his schematics out of the drop of a hat and informs me that it's 1 ounce per cycle.

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02 08 11 29 CC Apollo 8, looks like the flying EECOM and the ground EECOM came to a dead heat on that one.

02 08 11 39 CDR They did?

02 08 11 40 CC Roger. We got the same answer at the same time.

02 08 11 53 CDR I'll have Bill put it on the tape recorder and send it down to you.

02 08 37 05 CC Apollo 8, Houston.

02 08 37 11 LMP Go ahead, Houston. Apollo 8.

02 08 37 13 CC Okay, 8. We want to run a little exercise on the ground here to make sure that we're able to dump the tape and bring the voice portion back to Houston in a timely manner. So we plan to dump your tape, and we're going to exercise the procedures on the ground to get it back here and take a listen to it. We believe that we have something on the tape already unless you have recorded over it after the last dump. Just to make sure, we'd like to have you just say a few words, give us a short count or something on the tape and anything else that you might want to put on there. And we're going to do this in the next 5 minutes before we get away from Madrid. That's the site we want to exercise, so we'll go ahead and do that, and we'll tell you before we make the dump.

02 08 38 05 LMP Roger.

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02 08 44 20 IMP Houston, Houston, this is Apollo 8. Over.

02 08 44 24 CC Go ahead, Apollo 8.

02 08 44 29 IMP Okay. Ken, we put a few comments on the last of the tape after we heard from you, and it's being rewound now, and you can have it as soon as we get it back to the beginning.

02 08 44 38 CC Okay. We'll have to wait. It looks like you are going out of the attitude to use high gain. We'll catch it next time around and then dump it.

02 08 44 51 IMP Okay. I know this would be better in high bit rate, so it will probably take quite awhile.

02 08 44 55 CC Alright.

END OF TAPE



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57:19:05  
HGR dump  
to GTS  
no voice  
recorded  
on dump

02 09 16 44 CC Apollo 8, Houston.

02 09 16 49 LMP Go ahead, Houston.

02 09 16 51 CC Roger. Do you think you're in a position where  
you could use the high gain?

02 09 16 57 LMP I'll give it a try.

02 09 16 59 CC Okay.

02 09 19 05 CC Apollo 8, Houston. We're dumping at this time.

02 09 19 12 LMP Roger. Tape voice is probable.

02 09 19 21 LMP We ought to also get a check on it at low bit  
rate for DSE voice, Ken.

02 09 19 31 CC Apollo 8, are you saying that everything that's  
on there now is in high bit?

02 09 19 38 LMP That's where my switch was.

02 09 19 40 CC Okay. We'll take a look at it then. If there  
wasn't anything that was previously recorded  
in low bit, then we'll come back and maybe take  
a look at that, too.

02 09 19 52 LMP Okay. We might get ... if maybe we can get in  
a little closer to the moon to put as big a  
strain on it as we can.

02 09 28 24 CC Apollo 8, Houston.

02 09 28 30 LMP Go ahead, Houston.

02 09 28 31 CC Okay. We've completed the dump, and the tape  
recorder's back to you. You can use it any way  
you want. We may want to dump that thing again,  
and if we do we'll go ahead and use the same

STB  
STB